

**Abstract of the Disclosure**

A power management system for computers compresses contents of system RAM and stores the contents on a non-volatile storage device before power is suspended to a motherboard, which removes power also from RAM. By compression, the capacity required of the non-volatile storage device is minimized. In a variation, zeros are stored in all RAM area used by memory management software before compression and storage on the non-volatile device. In another variation, areas of RAM used by memory management software are identified, and only those areas not used by memory management software are stored on the non-volatile device. The capability is provided in several ways in different embodiments.